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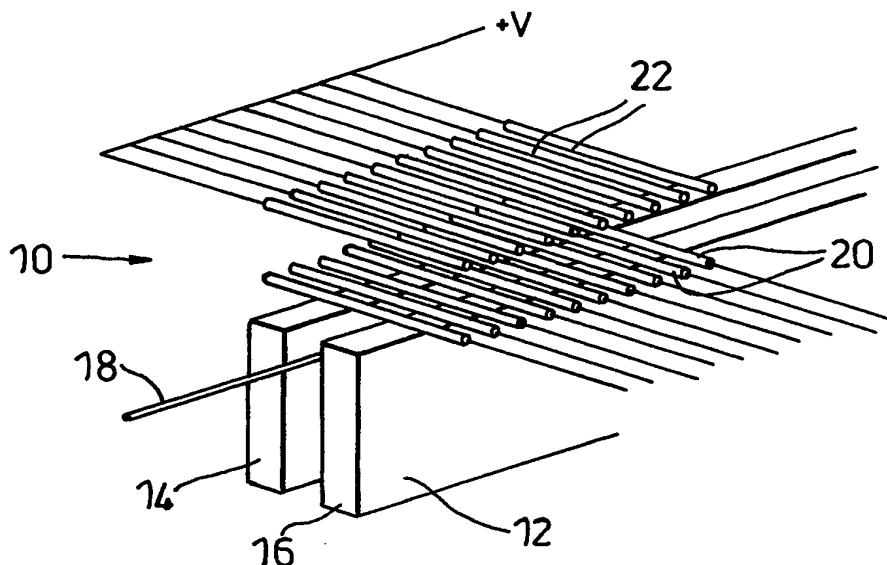
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(54) Title: X-RAY TUBE ELECTRON SOURCES



(57) Abstract: An X-ray tube includes an emitter wire (18) enclosed in a suppressor (14, 16). An extraction grid comprises a number of parallel wires (20) extending perpendicular to the emitter wire, and a focusing grid comprises a number of wires (22) parallel to the grid wires (20) and spaced apart at equal spacing to the grid wires (20). The grid wire are connected by means of switches to a positive extracting potential or a negative inhibiting potential, and the switches are controlled so that at any one time a pair of adjacent grid wires (22) are connected together to form an extracting pair, which produce an electron beam. The position of the beam is moved by switching different pairs of grid wires to the extracting potential.

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